

Remarks

Applicants have carefully reviewed the Official action mailed September 30, 2010 rejecting pending claims 1-14. As discussed below, applicants pending claims, distinguish over the art of record. For this reason, applicants traverse the rejection.

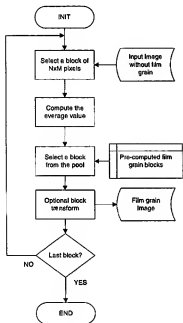
Before proceeding to address the present rejection, applicants will summarize their invention. As recited in claim 1, applicants provide a technique for simulating film grain by selecting from among a pool of previously established film grain blocks the selected block having an image parameter, such as intensity for example, whose average value most closely matching the average value of the corresponding parameter of the image. Independent method claim 8 also recites selecting a film grain block from among a pool of film grain blocks in a manner analogous to the selecting step recited in claim 1.

35 U.S.C. § 102(e) Rejection of Claims 1-14

Claims 1-14 stand rejected under 35 U.S.C. § 102(e) as anticipated by US Published Application 2007/0117291 which claims priority to US Provisional Application 60/527,895 filed December 3, 2003 in the name of Jeffrey Cooper et al. (hereinafter, the Cooper et al. published application.) While applicants' pending application claims priority to US Provisional 60/505,146 filed, September 23, 2003 (thus predating the Cooper et al. provisional application), the examiner contends that applicants' provisional application does not provide support for the claimed subject matter. Rather, the examiner contends that only applicants' PCT application, filed September 10, 2004 (after the filing of the Cooper et al. provisional application) provides support for the claimed subject matter. Therefore, the examiner maintains that the Cooper et al. published application constitutes timely prior art. Applicants respectfully disagree.

Applicants' provisional application provides ample support for applicants' claims, and specifically, the feature of selecting a film grain block based on a computed average value of at least one image parameter. To that end, applicants' have reproduced the 2nd paragraph on page 3 of their provisional application, along with FIG. 5.

Following the pool creation process, information from the SEI message is not further required to assist the mosaicing process that creates the film grain image. As illustrated in Figure 5, film grain generation is now avoided by directly selecting a pre-computed block of film grain from the pool. When more than one block is available for the same intensity level and color component, a selecting criterion should be specified. In a particular implementation, the system could pseudo-randomly select one of the blocks from the pool to avoid the creation of patterns when a reduced number of blocks is available. Along these lines, the mosaicing process could make use of transformed copies of the set of available film grain blocks in a similar approach to that described in [5].



The reproduced paragraph from applicants' provisional application, when read in connection with FIG.5, clearly indicates that applicants' provisional application teaches the feature of selecting a block based on the average value of the image block. Given that selection occurs in FIG. 5 immediately after computation of the average intensity value, there is only one logical interpretation of the statement in the applicants' provisional application regarding the use of selection criteria when one than one block has the same intensity level and color component. The inescapable conclusion from this statement in applicants' provisional application is that block selection occurs in accordance with the intensity level. Therefore, applicants' provisional application provides ample support for applicants' claimed feature of block selection in

accordance with the intensity. Since applicants' provisional application predates the Cooper et al. published application, the Cooper et al. published application cannot legitimately serve as a proper reference under 35 U.S.C. § 102(e).

Assuming that the Cooper et al. published application constitutes a timely reference which applicants do not concede, the Cooper et al. published application does not anticipate applicants' claims. With regard to anticipation, the Federal Circuit has mandated that anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (*Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1983)) (emphasis added).

Applicants' independent claim 1 recites the step of:

selecting, from among at least one pool of previously established film grain blocks, a film grain block having image parameter most closely matches the average value of the at least one image parameter of the successive block.

Notwithstanding the examiner's assertions to the contrary, the Cooper et al. published application does not teach this feature of applicants' claim 1 and claim 8, and the claims that depend therefrom. Paragraph [0010] of the Cooper et al. published application, upon which the examiner relies, recites the following regarding block selection:

In accordance with another aspect of the present invention, there is provided a method for simulating film grain in an image block of pixels. The method commences upon selection of a block of film grain from a pool of pre-established film grain values. The selection of the block of film grain occurs *randomly*, in accordance with a random number, amongst those blocks from the pool for the luma intensity interval corresponding to the luma average value of the image block. The selected film grain block undergoes deblocking. At least a portion of the deblocked film grain block is blended with individual pixels of the image block to simulate film grain and the resultant blended pixels are clipped prior to output, such as for display or the like.

As specifically recited in the foregoing paragraph of the Cooper et al. published application, block selection occurs *randomly*, among a pool of blocks having a matching luma value. Thus, all of the blocks in the pool in described in the Cooper et al. published application have matching

luma intensities. Therefore, block selection by Cooper et al. does not occur by matching the block to the block having the closest average intensity value, as recited in applicants' claim 1 and 8 and the claims that depend therefrom. Not only does the Cooper et al. published application fail to teach applicants' claimed invention, Cooper et al. actually teaches away from the claimed invention. Random selection of blocks involves no matching or comparison, and thus, would not lead a skilled artisan to conceive of applicants' claimed invention.

For the reasons given above, applicants' pending claims patentably distinguish over the Cooper et al. published application. Accordingly, applicants request withdrawal of the 35 U.S.C. § 102(e) rejection of the claims.

Conclusion

In view of the foregoing, applicants solicit entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the applicant's attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to this Amendment. Please charge any fee or credit any overpayment to Deposit Account No. **07-0832**.

Respectfully submitted,
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December 7, 2010